

What is claimed is:

1. A circuit device comprising:
a circuit board,
an insulating layer formed on the circuit board,
a conductive pattern formed on the insulating layer,
a circuit element electrically connected to the conductive pattern,
wherein a protrusion partially extending and being buried in the insulating layer is provided on the circuit board.
2. The circuit device of claim 1, wherein the protrusion and the conductive pattern are put in direct contact.
3. The circuit device of claim 1, wherein the insulating layer is provided between the protrusion and the conductive pattern.
4. The circuit device of claim 1, wherein the protrusion is provided on the circuit board at a location corresponding to a lower part of the conductive pattern having the circuit element disposed thereon.
5. The circuit device of claim 1, wherein the circuit board is formed of a metal mainly comprising copper.
6. The circuit device of claim 1, wherein the protrusion has a column-like shape.
7. The circuit device of claim 1, wherein
a semiconductor element having no terminals on a back surface thereof is employed as the circuit element;
the protrusion is provided on the circuit board at a location corresponding to a lower part of the conductive pattern having the semiconductor element attached thereto;
the conductive pattern having the semiconductor element attached thereto and the protrusion are in direct contact.
8. The circuit device of claim 1, wherein
a convex portion is formed in a rear surface of the conductive pattern located above the protrusion and the convex portion is buried in the insulating layer.

9. A method of manufacturing a circuit device forming an electrical circuitry comprising a conductive pattern and a circuit element provided on a circuit board via an insulating layer, including

providing a protrusion extending partially on the circuit board;
burying the protrusion into the insulating layer.

10. A manufacturing method of a circuit device comprising:
providing a protrusion extending partially on a circuit board;
attaching a conductive foil on the circuit board via an insulating layer covering the circuit board so as to bury the protrusion;
forming a conductive pattern by patterning the conductive foil;
electrically connecting the conductive pattern with a circuit element.

11. The method of claim 8 or claim 9, wherein the protrusion is formed by etching.

12. The method of claim 8 or claim 9, wherein the protrusion has a column-like shape.

13. The method of claim 8 or claim 9, wherein an upper surface of the protrusion is formed to be planar and an insulating layer is interposed between the protrusion and the conductive pattern.

14. The method of claim 8 or claim 9, wherein sidewalls of the protrusion are formed to have a curved surface.